



## 2016 Massachusetts HIV/AIDS Epidemiologic Profile Women

### Fast Facts

- In 2014, 154 women were diagnosed with HIV infection in Massachusetts.
- HIV infection disproportionately affects black women and Latinas relative to white women.<sup>i</sup>
- Among black women, 69% (N=185/269) recently (2012–2014) diagnosed with HIV infection were born outside of the US.

### Introduction

From 2005 to 2014, the annual number of HIV infection diagnoses decreased 38% among women (from 250 to 154) compared to 28% among men (from 663 to 475).<sup>ii</sup>

Currently, women (female sex at birth) represent:

- 26% (N=517) of people diagnosed and reported with HIV infection during 2012 to 2014, and
- 29% (N=5,833) of people known to be living with HIV infection in Massachusetts (as of December 31, 2015).

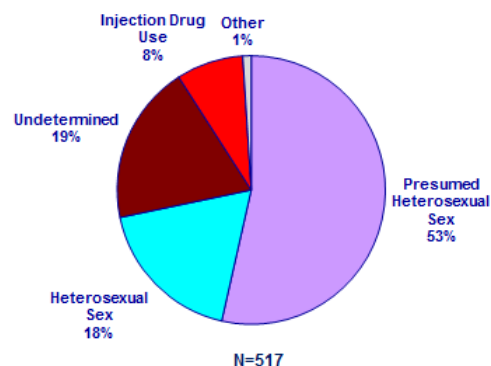
Transgender women represent an additional:

- 1% (N=13) of people diagnosed and reported with HIV infection during 2012 to 2014, and
- 1% (N=53) of people known to be living with HIV infection in Massachusetts (as of December 31, 2015).

### Exposure Mode:

- Heterosexual sex with partners of unknown risk and HIV status (presumed heterosexual) was the most frequently reported exposure mode among women diagnosed with HIV infection during 2012 to 2014 (Figure 1).

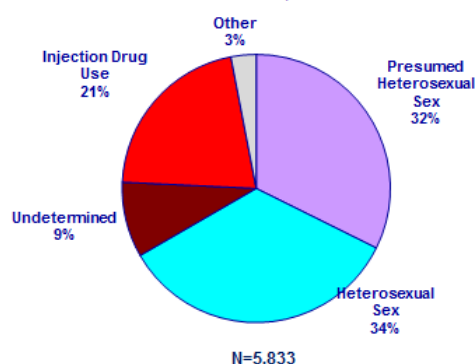
**Figure 1. Percentage Distribution of Women Diagnosed with HIV Infection by Exposure Mode: Massachusetts, 2012–2014**



Data Source: MDPH HIV/AIDS Surveillance Program. Data are current as of 3/1/16 and may be subject to change (percentages may not add up to 100% due to rounding).

- Most women living with HIV infection were reported as having heterosexual or presumed heterosexual exposure (Figure 2).<sup>iii</sup>

**Figure 2. Percentage Distribution of Women Living with HIV Infection by Exposure Mode: Massachusetts, December 31, 2015**



Data Source: MDPH HIV/AIDS Surveillance Program. Data are current as of 3/1/16 and may be subject to change (percentages may not add up to 100% due to rounding).

### Race and Ethnicity:

- The majority of women recently diagnosed with HIV infection are members of racial/ethnic minorities. Fifty-two percent were black (non-Hispanic), and 26% were Hispanic/Latina (Figure 3).

For detailed data tables and technical notes see Appendix

Bureau of Infectious Disease and Laboratory Sciences

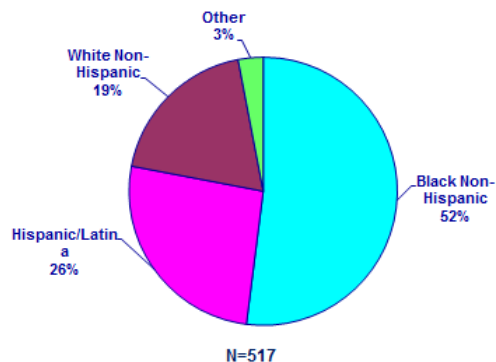
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**Figure 3. Percentage Distribution of Women Diagnosed with HIV Infection by Race/Ethnicity: Massachusetts, 2012–2014**



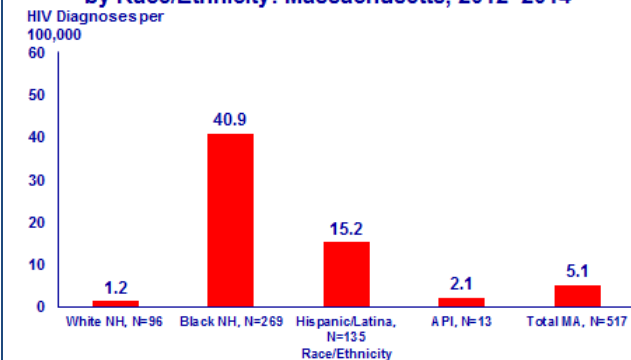
Data Source: MDPH HIV/AIDS Surveillance Program. Data are current as of 3/1/16 and may be subject to change (percentages)

- Similarly, among people living with HIV infection, 46% (N=2,695/5,833) of women are black (non-Hispanic), compared to 23% (N=3,388/14,439) of men; and 27% (N=1,585/5,833) are Hispanic/Latina, compared to 24% (N=3,444/14,439) of men.

#### Disparate Impact:

- Black (non-Hispanic) and Hispanic/Latina women recently diagnosed had rates 33 and 12 times that of white (non-Hispanic) women, respectively (Figure 4).

**Figure 4. Average Annual Age-Adjusted Rate of HIV Infection Diagnosis per 100,000<sup>1</sup> Population Among Women by Race/Ethnicity: Massachusetts, 2012–2014**



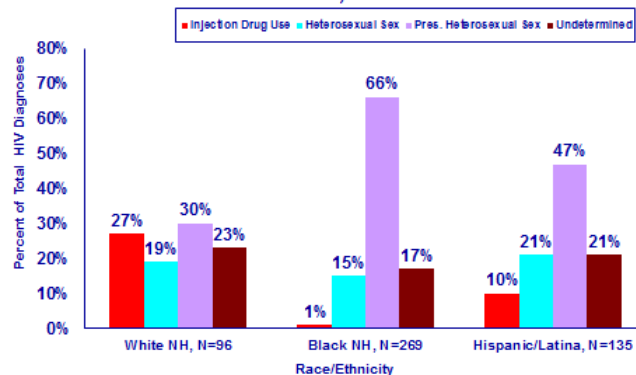
<sup>1</sup> Population sizes are from the Massachusetts Department of Public Health Modified Age, Race/Ethnicity, & Sex Estimates 2010; all rates are age-adjusted using the 2000 US standard population; NH= Non-Hispanic; API = Asian/Pacific Islander; AI/AN = American Indian/Alaska Native; Data Source: MDPH HIV/AIDS Surveillance Program. Data are current as of 3/1/16 and may be subject to change.

- Similarly, black (non-Hispanic) and Hispanic/Latina women living with HIV infection had age-adjusted prevalence rates 28 (1,268.7 per 100,000) and 14 (631.5 per 100,000) times that of white (non-Hispanic) women (46.1 per 100,000), respectively.

#### Exposure Mode and Race/Ethnicity:

- Presumed heterosexual sex accounted for 66% of reported exposures among black (non-Hispanic) women, 47% of exposures among Hispanic/Latina women, and 30% of exposures among white (non-Hispanic) women recently diagnosed with HIV infection (Figure 5).<sup>iv</sup>

**Figure 5. Percentage Distribution of Women Diagnosed with HIV Infection by Race/Ethnicity and Exposure Mode: Massachusetts, 2012–2014**

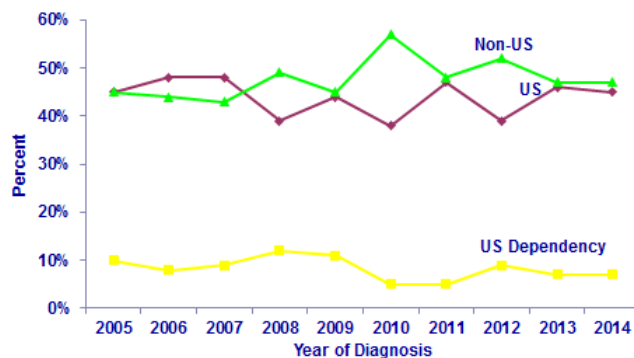


Data Source: MDPH HIV/AIDS Surveillance Program. Data are current as of 3/1/16 and may be subject to change

#### Place of Birth:

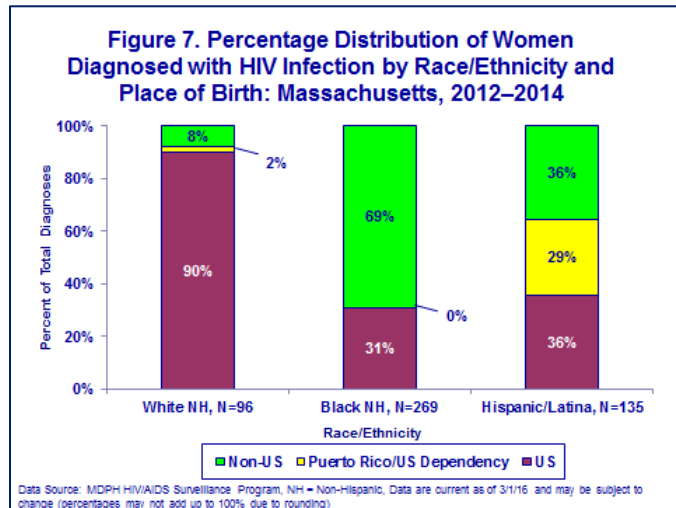
- Forty-nine percent of 517 women recently diagnosed with HIV infection were born outside the US, compared to 30% of 1,510 men.
- Thirty-seven percent of 5,833 women living with HIV infection were born outside the US, compared to 21% of 14,439 men.
- The proportion of women diagnosed with HIV infection who were born outside the US increased from 45% (N=112/250) in 2005 to 57% (N=118/208) in 2010 and then decreased to 47% (N=73/154) in 2014 (Figure 6).

**Figure 6. Percentage Distribution of Women Diagnosed with HIV Infection by Place of Birth and Year of Diagnosis: Massachusetts, 2005–2014**



N=1,993; Data Source: MDPH HIV/AIDS Surveillance Program. Data are current as of 3/1/16 and may be subject to change

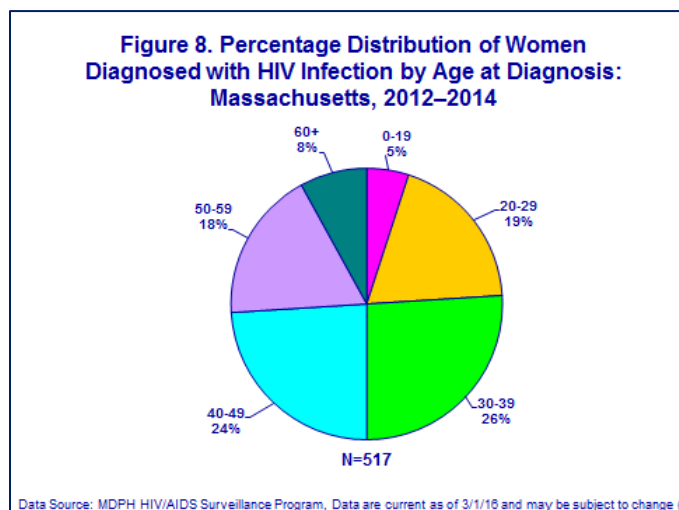
- Sixty-nine percent of black (non-Hispanic) women recently diagnosed with HIV infection were born outside the US, compared to 36% of Hispanic/Latina women and 8% of white (non-Hispanic) women. An additional 29% percent of Hispanic/Latina women were born in Puerto Rico or another US Dependency, compared to 2% of white (non-Hispanic) women and no black (non-Hispanic) women (Figure 7).



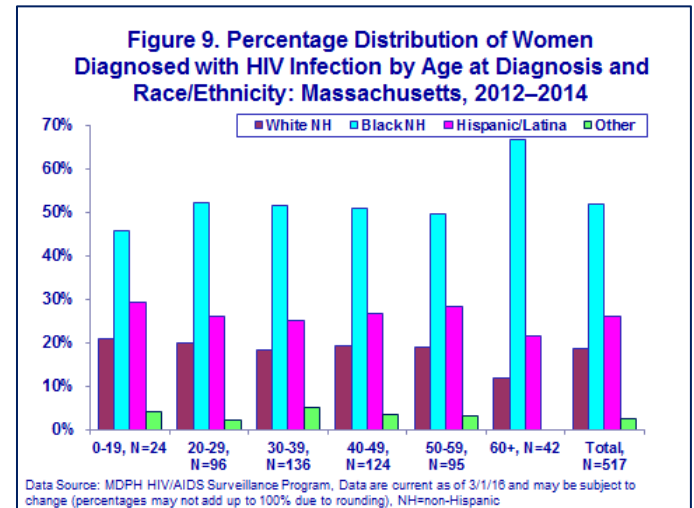
- Black (non-Hispanic) women born outside the U.S. comprised 36% (N=185/517) of all Massachusetts women diagnosed with HIV infection during 2012 to 2014.

### Age at HIV Diagnosis:

- Fifty percent of women diagnosed with HIV infection during 2012 to 2014 were between the ages of 30 and 49 years (Figure 8).



- Sixty-seven percent (N=28/42) of women recently diagnosed with HIV infection at age 60 years or older are black (non-Hispanic), compared to 52% (N=269/517) of all women recently diagnosed (Figure 9).



### Regional Distribution:

- Among Health Service Regions (HSRs),<sup>iv</sup> the Northeast HSR had the largest proportion of women among those diagnosed with HIV infection during 2012 to 2014 at 34% (N=133/392). Among people living with HIV infection, the Central and Western HSR have the largest proportions of women at 38% (N=641/1,708), and 36% (N=785/2,191), respectively.

Among cities with over 20 people diagnosed with HIV infection during 2012 to 2014, the following have the highest proportions of women (*NOTE: N indicates number of women diagnosed with HIV infection*):

City	N	%
Malden	15	48%
Lowell	34	43%
Lynn	21	42%
Everett	12	41%
Brockton	31	39%
Waltham	12	36%
Worcester	27	35%
Springfield	46	34%
Lawrence	21	33%
New Bedford	15	31%
All others	283	20%
<b>Massachusetts Total</b>	<b>517</b>	<b>26%</b>

## Women at Risk of HIV Infection

**Behavioral Risk Factors:** According to behavioral surveys, women in Massachusetts are engaged in behaviors that place them at risk for HIV infection.

- Among 605 sexually active female respondents (aged 18–64 years) to the 2014 Massachusetts Behavioral Risk Factor Surveillance Survey (BRFSS), 76% reported that they did not use a condom at their last sexual encounter. Of these, the most common reason reported for not using a condom was being in a monogamous relationship (58%), followed by using another form of birth control (23%).<sup>v</sup>
- Among high school-aged female respondents to the 2013 Massachusetts Youth Risk Behavior Survey (MYRBS), 1% reported ever using a needle to inject drugs; among those who reported sexual intercourse in the three months before the survey, 51% reported condom use at last intercourse; 18% reported substance use prior to last intercourse.<sup>vi</sup>

### Data Sources:

HIV/AIDS Case Data: MDPH HIV/AIDS Surveillance Program; data as of 3/1/16

BRFSS Data: Massachusetts Department of Public Health, Bureau of Center for Health Information, Statistics, Research and Evaluation, Behavioral Risk Factor Surveillance System

YRBS Data: Massachusetts Department of Elementary and Secondary Education, 2013 Youth Risk Behavior Survey Results

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<sup>i</sup> Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=24 children living with HIV infection under age 13 as of 1/1/16). Data reflect sex at birth and therefore not gender identity or gender expression of transgender individuals (N=56 transgender individuals living with HIV infection).

<sup>ii</sup> Effective January 1, 2011, the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>iii</sup> The category of presumed heterosexual is used exclusively for women, to define HIV exposure mode in cases when sex with men is the only reported risk factor for HIV infection.

<sup>iv</sup> Reflects the health service region of a person’s residence at the time of report (not necessarily current residence). HSRs are regions defined geographically to facilitate targeted health service planning. See Epidemiologic Profile General Appendices, Health Service Region Maps, available at <http://www.mass.gov/eohhs/docs/dph/aids/2006-profiles/app-hrs-maps.pdf> for configuration of health service regions.

<sup>v</sup> 2014 behavioral risk data are from the 2014 Massachusetts Behavioral Risk Factor Surveillance System, for more information see: Office of Data Management and Outcomes Assessment, Massachusetts Department of Public Health. *A Profile of Health Among Massachusetts Adults, 2014 Results from the Behavioral Risk Factor Surveillance System*, August 2015, <http://www.mass.gov/eohhs/docs/dph/behavioral-risk/report-2014.pdf>

<sup>vi</sup> 2013 behavioral risk data are from the 2013 Massachusetts Youth Risk Behavior Survey, for more information see: Massachusetts Department of Elementary and Secondary Education, Massachusetts Department of Public Health. *Health and Risk Behaviors of Massachusetts Youth 2013*. May 2014, <http://www.doe.mass.edu/cnp/hprograms/yrbs/2013report.pdf>